The Mountain Weather Journal

Volume: 4 *Issue: 1*

What's New at JKL?????

By: Shawn Harley
Meteorologist-in-Charge

Greetings from your friends and neighbors at the National Oceanic and Atmospheric Administration's (NOAA) National Weather Service Forecast Office in Jackson, Kentucky.

As winter draws to a close, we have been busy preparing for the upcoming spring and summer severe weather season. While severe thunderstorms can occur any time of year, the threat of severe weather reaches its peak during the late spring and early summer. This year you will have the capability to better monitor approaching thunderstorms using an enhanced interactive radar display available on our webpage. When you visit our webpage at www.weather.gov/jacksonky you can view the new and improved radar imagery by choosing the local radar option on the left hand menu, or by clicking on the radar thumbnail near the bottom of the front page. You can also view an enhanced national radar display by choosing the nationwide option on the left hand menu.

The new radar webpage allows the National Weather Service to combine radar and warning imagery with commonly used topographic and map features. The new display has increased functionality and allows you to view radar imagery and warnings on a single display. Areas under tornado warnings, severe thunderstorm warnings, and flash flood warnings are highlighted in different colors. You can toggle the warnings areas off and on to allow for a better view of the radar imagery by itself. The display can also be personalized for your needs by turning on or off such features as the topographic display, and the maps of counties, rivers, highways and cities.

The enhanced radar display also allows you to quickly determine the distance between you and an approaching storm. If you left click on the map at a specific location, you can view a readout that shows distance and direction from that chosen point to any other point on the map. This allows you to determine exactly where you are located in relation to a particular storm. Another new feature is the enhanced regional sector display. These images are mosaics of the National Weather Service radars in a certain geographic area, and allow you to get the "big" picture of an approaching storm system.

While the enhanced radar imagery displays will be evident to anyone who routinely utilizes our webpage, there are some other radar enhancements which will not be as evident, but which will be especially important for National Weather Service radar operations. During the last full week of February, technicians from the Radar Operations Center in Norman, Oklahoma in cooperation with the electronics staff of the Jackson National Weather Service Office, completed a significant upgrade to the Doppler radar system at Jackson. The radar improvements were part of a national effort to modernize the National Weather Service Doppler radar network. New hardware and software was installed at the transmitter site, and this will ultimately improve radar performance. Although Doppler radar software has become more sophisticated and display capabilities have steadily improved during the past decade, this is the first time that major changes have been made at the transmitter. The new radar components that were installed are part of a modular design which will make it easier to implement future system upgrades. This will also pave the way for the next advancements in radar technology.

As always, we would appreciate hearing from you. If you have any comments regarding the newsletter, NOAA Weather Radio All Hazards, our webpage, or any other service we provide please give us a call, send us an email, or drop us a note. We are constantly striving to improve our products and services and your feedback is important.

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Weather Safety Tips

By: William Modzelewski
Meteorologist Intern

It's that time of the year to start thinking about how to stay safe in dangerous weather situations. Eastern Kentucky sees most of its severe weather from March through August. The greatest amount of wind damage, large hail, and tornadoes occur in May, although severe weather is possible at any time of the year. It is important to know how to stay safe when severe weather is approaching your area.

One important factor in staying safe is knowing when severe weather is possible. There is a wealth of information available on the Jackson National Weather Service web site. In addition to your local point specific forecast, you can access National Weather Service Doppler radar, satellite pictures, current conditions, and most any other type of weather information you may be looking for. Our web site address is weather.gov/jacksonky. Another way of getting weather information is over NOAA Weather Radio All Hazards. A network of radio transmitters broadcast weather information directly from the National Weather Service 24 hours a day, seven days a week. Special radios are available from electronics and some department stores, where an alarm will alert you to approaching severe weather. The alarm is immediately activated by the National Weather Service in Jackson when watches or warnings are issued for tornadoes, severe thunderstorms, flash flooding, or any hazard that threatens life and property. This is the most reliable way to receive watches and warnings directly from the National Weather Service. An important feature of the weather radios with the alarm function is their ability to wake you up at night to warn of impending danger.

One thing to remember during severe weather is the difference between a watch and a warning. A watch means that conditions are favorable for the development of severe weather, while a warning means the severe weather is imminent as indicated by the NWS Doppler Radar or Skywarn Spotters.

Lightning is a danger in all thunderstorms. A good rule to remember is if you can hear thunder, you can be struck by lightning even if it is not raining. If you are outside, you should seek shelter as soon as you hear thunder. You should stay inside until at least 30 minutes after the last rumble of thunder is heard. This is because the lightning from the thunderstorm can strike as far as ten miles away from the storm. An average of 300 people per year are injured by lightning strikes, with an average of 67 killed every year by lightning.

Tornadoes can have wind speeds anywhere from around 70 MPH for weak tornadoes, to well over 250 MPH for strong, violent tornadoes. Tornadoes are most common in eastern Kentucky in May, but can occur at any time of the day or night, and at anytime of the year. The safest place to seek shelter during a tornado is in your basement. If you do not have a basement, seek shelter in an interior room on the lowest floor of your home away from windows, such as a closet or bathroom. If you are caught outside or in your car, try to find shelter in a sturdy building. If none is available, seek shelter in a ditch or culvert, not under a highway overpass. Do not try to outrun a tornado in your car.

A thunderstorm is considered severe by the National Weather Service when winds of at least 58 MPH occur, or hail ¾ of an inch in diameter is observed, or a tornado occurs. Winds of 58 MPH can bring down trees, tree limbs and power lines. Winds in excess of 58 MPH can cause structural damage to home and buildings, as well as downing trees and power lines. Winds in some severe thunderstorms can reach over 100 mph, causing damage similar to that caused by tornadoes. Hail ¾ of an inch or larger can cause structural damage to buildings and cars, crop damage, and injuries to humans and animals. The safest place to be in a thunderstorm is in an interior room of your home or business, away from windows.

Flash floods occur quickly with rapid water rises. These rises are usually caused by heavy rainfall, but can also be caused by dam and levee failures, and ice jams in rivers. If you see a flooded roadway, do not drive your vehicle through it. Remember, "Turn around, don't drown". Flash flooding occurs quickly, while river flooding generally is a longer term event that can last several days or more. Both can be very dangerous. You should know an evacuation route if flooding occurs, and move to higher ground. Follow instructions given by local authorities.

Remembering a few safety tips and being aware of the weather conditions can save your life.

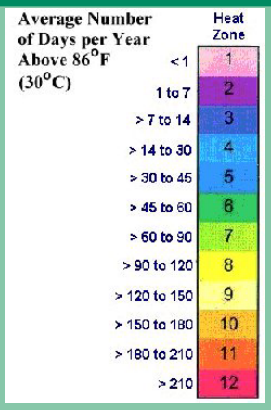
How Does Weather Affect My Garden?

By: Bonnie Terrizzi
Hydrometeorological Technician

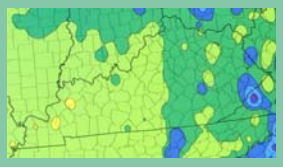
Weather is the ultimate factor for plants to survive or thrive. Extreme cold, heat and drought have a direct effect on the survival of plants. Climate is the typical behavior of the weather. Climate is the main reason plants favor certain places to live. Knowing the local climate is a key factor to successful gardening.

Last Day of Freeze for Jackson, KY	Risk	First Day of Freeze for Jackson, KY
March 23	10% chance that the last freeze has occurred.	October 3
April 10	50% chance that the last freeze has occurred.	November
May 16	90% chance that the last freeze has occurred.	November 13

Extreme Cold & Freeze: Extreme cold and freeze can kill a plant instantly. The United States Department of Agriculture (USDA) uses Plant Hardiness Zones which factors in average winter minimum temperatures. The plant Hardiness Zone for East Kentucky is zone 6, where minimum winter temperatures can fall to a minus 10 degrees Fahrenheit. Plant selections for your garden should start with making sure they will survive the winter by utilizing the USDA Hardiness Zone Map. Annuals, plants that live only for one year or one season, are capable of living years in a frost-free environment. Knowing the first and last freeze days can help in successful gardening. The following table shows the last day of spring freeze and the first day of fall freeze.



KY AHS Heat Code



Monthly Precipitation Average for WFO Jackson, KY

J	F	M	A	M	J	J	A	S	O	N	D
3.6	3.7	4.4	3.8	5.2	4.7	4.6	4.1	3.8	3.2	4.2	4.3

Heat: Heat causes plants to stress and can even kill subtly. The American Horticultural Society (AHS) uses heat codes based on the average number of days per year with high temperatures greater than 85° F (the temperature that plants begin to suffer).

The primary AHS heat code for East Kentucky is 45-60 days which places East Kentucky in Heat Zone 6. Make sure that any plants purchased have heat zone suitable to zone 6 on the tag.

Light: Light is essential for photosynthesis, energy growth, and development. Light is an essential source for heat. Cloud cover and other particulars in the air affect the amount of light affecting the plants. The mean percentage of possible sunshine for NWS Jackson is 55% for the growing season. While you may not be able to control the clouds, you now know the light and the heat information of your area, and you can fine-tune the location (shady vs sunny) of the plant that is suggested for the specified zone for a spectacular result.

Moisture: Plant tissues must contain enough water to keep their cells active. Some plants may be advertised as drought-tolerant, but no plant can survive becoming completely dry. Too much water can cut off oxygen supply to the root. Knowing the local seasonal rainfall rate can help determine a successful irrigation schedule. WFO Jackson receives 49 inches of precipitation annually.

Wind: Transpiration from the plants and evaporation from the soil causes a significant moisture loss for plants. Since wind enhances the evaporation and transpiration, on a hot day, the wind will have a negative effect and rapidly dehydrate the plant. Knowing the average wind speed and direction for your area will help you be a better gardener. You can reduce the air circulation by building fences and planting hedges. At the NWS office in Jackson, the average wind speed is 6.3 mph from the South.

WEB LINKS OF INTEREST:

US Arboretum: http://www.usna.usda.gov/
Midwest Regional Climate Center: http://mrcc.sws.uiuc.edu/ Climate Prediction Center: http://www.cpc.ncep.noaa.gov/
University of KY Ag Weather: http://wwwagwx.ca.uky.edu/
US Department of Agriculture: http://www.usda.gov/wps/portal/usdahome

Fire Weather Safety Tips

By: Jonathan Pelton
Incident Meteorologist

Safety Tips and Thing to Remember During Fire Season

Fire Season in Kentucky is broken into two parts. The spring season runs from February 15th through May 30th, while the fall season runs from October 1st through December 15th. During this time, it is illegal to burn anything within 150 feet of any woodland or brushland, except between the hours of 6 p.m. and 6 a.m.

Safety precautions should be taken and weather conditions considered before conducting any outdoor burning and remember to check with the Kentucky Division for Air Quality and Division of Waste Management to make sure you are in compliance with their outdoor burning regulations. NEVER burn anything in windy weather or during extreme drought conditions. It is important to be alert to the increased threat of wildfires during these fire seasons, especially during dry periods or drought conditions. This is especially true for those whose home is in a forested area and for those who plan on visiting area forests. Here are some safety tips to help protect life and property from wildfires:

1. Check with local fire authorities or public land management officials to obtain current fire restriction information.

2. For campfires, clear the campfire site down to bare soil. Circle the fire pit with rocks and build the campfire away from overhanging branches, dry grass, pine needles, logs and steep slopes.

3. Never leave a campfire unattended. When putting out a campfire, drown the fire. Keep a bucket and shovel nearby.

4. Homes near forest areas should have trees thinned within 100 feet of buildings. Remove lower tree branches, especially those that may overhang the roof.

5. Rake and clear surface fuels, such as leaves, limbs and pine needles, away from homes in wooded areas.

For detailed information on protecting your home from wildfires, visit the Firewise website at www.firewise.org.

Winter Season 2005-2006 Climate Summary

By: Jeff Carico
Hydrometeorological Technician

The winter season of 2005-06 saw warmer than normal temperatures along with drier than normal conditions. Thanks to an abnormally warm January, the Jackson Weather Office finished winter 3 degrees above normal, while the London-Corbin Airport ended up around one degree warmer than normal. Although Jackson was around one inch drier than normal, London finished up over two inches below normal. For snowfall, the Jackson Weather Office was some 5 inches below normal for the winter months of December, January and February. Official snowfall observations aren't taken at the London-Corbin Airport.

The Jackson Weather Office ended the season with a maximum average temperature of 48.2 degrees and a minimum average temperature of 28.3 degrees. The mean temperature for winter 2005-06 was 39.7 degrees which is 3 degrees above the normal temperature of 36.7 degrees. The winter of 2006 was the 8th warmest on record since the Jackson Weather Office opened in 1981. Jackson recorded 10.60" of precipitation during the winter season which is 0.97" below the normal of 11.57". Jackson also received 13.6" of snow during the same timeframe. Jackson normally sees 18.9" during the winter months of December, January, and February.

The London-Corbin Airport finished winter with an average temperature of 38.1 degrees which is 0.9 degrees above the normal of 37.2 degrees. London had a maximum average of 47.7 degrees with a minimum average of 28.5 degrees. London's winter of 2005-06 tied as the 10th warmest winter since climate records began in 1954. London received 9.94" of precipitation through December, January and February which is 2.10" drier than the normal of 12.04".

Looking ahead towards spring 2006, the Climate Prediction Center has indicated that near normal temperatures and near normal precipitation can be expected over March, April and May.

If your business or organization is interested in hosting a spotter training class or a safety talk, please contact Tom Johnstone, our Warning Coordination Meteorologist at (606) 666-2560, Ext. 726.

News from the COOP

By: Dave Stamper
Data Acquisition Program Manager

Honored Institute Award for 25 Years of Service presented to Hazard State Police on March 2, 2006
L-R, Dispatchers Gretta Huff, Jimmy Duncil, Sherry Cole, Glenna Huff, and Supervisor David Adams.
Presenting award is Jackson KY, MIC, Shawn B. Harley.

25 Years of Service for Stearns , KY on February 21, 2006
L-R, County Judge Ex. Blain Phillips, Stearns Observer, Rudy Young, DAPM Dave Stamper and Gen Fcst Tony Edwards.

NEW STAFF

Observers that call in their weather reports may have recognized a new voice on the phone. Please welcome Mr. Bill Modzelewski. Bill joined our staff on December 13th of 2005. Bill's weather career began in Erie Pa in 1993. From there he went to Youngstown, OH in 1997, then back to Erie in 1998. Bill also spent a little time in Columbus, Oh. in 1999 and then returned to Erie in 2000. Bill remained in Erie until he joined our office. We are expecting Bill to be our snow measuring expert since Erie averages about 95 inches of snow a year. Jackson gets just a little over 20. Welcome Bill

NEW OBSERVERS

We have installed two new weather stations in Elliott County. A ridgetop station was put in at the town of Gimlet, about 9 miles north of Sandy Hook. Theodore Wagoner is the new observer at Gimlet.

Also, a new station is being installed at the Sandy Hook Waste Water Treatment Plant. This is a valley location in the city limits of Sandy Hook. Mark Smith and Rocky Horton are the observers at the W.W.T.P.

Welcome to the new weather observers.

Tech Tips

By: John Jacobson
Lead Forecaster

A Few Interesting Places to Go on the Internet

Are you interested in viewing some of the local climate records? We have a new place on our web site where you can look up and see what the past daily climate data was for London and Jackson. This is the link: http://www.weather.gov/climate/index.php?wfo=jkl . While you are there, take a look and see what other changes we have made lately.

Another interesting site is the Mesowest Site. You can use it to get weather observation from all over the country. The web site address is: http://raws.wrh.noaa.gov/roman/ just click on Kentucky and see what is available. On this site, you can actually download historical data to an Excel file.

Have you seen our new radar display? It overlays the highways and makes it really easy to see how close the storms are coming to your house. It also graphically shows you where all the active weather warnings are located. Go to the following link: http://radar.weather.gov/radar.php?rid=jkl&product=N0R&overlay=11101111&loop=no

INTERESTING WEATHER FACTS

1. The average lifespan of a tornado is less than 15 minutes.

2. A storm officially becomes a huricane when winds hit 74 MPH.

3. The sunniest place on Earth is the South Pole.

4. Raindrops do not really look like the traditional tear-shaped pictures, they actually flatten out as they fall, forming more of a pancake shape instead.

5. Ever wonder how much rain weighs? If one inch of rain falls on an acre of ground, it weighs approximately 226,000 pounds.

6. Keraunophobia is the fear of lightning, Bronto phobia is the fear of thunder.

Aviation News

By: Dustin Harbage
Lead Forecaster

Aviation forecasting is very important to pilots but can be of interest to almost everyone, especially in the spring. That is when the thunderstorm season gets into full swing. The battle is between the retreating cold winter air from the north and the advancing warm air from the south. The stark contrast creates an area where rising air currents carry moisture aloft and produce some of the most severe weather known. Those thunderstorms may produce damaging winds, large hail, and even tornadoes. While these weather phenomena are frightening to those on the ground, they can be even more so to an aviator.

Many times a forecast of large hail indicates hail sizes in the range of ¾ to one inch. This same hail can be as large as 2 to 3 inches when encountered in flight. Encountering this type of weather at speeds of one to two hundred miles per hour can do serious damage to an aircraft. Damaging winds at the surface can also be experienced when flying in the form of turbulence that can range from just making a flight uncomfortable to downright dangerous and even uncontrollable. Fortunately, the latest advances in radar and satellite technology aid pilots in avoiding areas of developing thunderstorms. The newest computer models have advanced the state of the art of forecasting to the degree that relatively accurate forecasts and areas of anticipated weather can be predicted up to 7 days in advance. The key ingredient to the production of these forecasts is in the experience and training of our forecasters.

The local forecaster provides a 24-hour forecast around an aerodrome of interest. This forecast is then coupled with an enroute forecast provided by forecasters at the National Weather Service Aviation Weather Center. Their web site can be found at: http://aviationweather.gov/ . The final piece of the equation comes from the Center Weather Service Unit; a team of highly trained forecasters in each Air Traffic Center that provides up to the minute weather briefings to controllers, enabling them to route air traffic around areas of hazardous weather.

While flying can be hazardous, the services at each level help pilots and those that travel with them to arrive safely at their destination. This is important to the pilot or student pilot that is just flying around an individual airport for fun, as well as the business traveler or vacationing family flying to remote destinations.

Visit us online at:

www.weather.gov/jacksonky

Weather History

By: Ed Ray
General Forecaster

The Year without a Summer

Everyone talks about the weather. And usually the stories that catch our attention the most are those that are hard to believe, or that seem bigger than life itself, often relayed by our grandparents as they remembered them while growing up. One such story takes place in the New England states in the year of 1816, or more commonly known as the year without a summer.

During this period in American history, most people lived east of the Mississippi River. Also, most folks were farmers and depended greatly on their annual harvest to make it through subsequent winters. Variations in the weather were common enough, but this particular year was especially different. It had been reported in New Hampshire that the winter season from 1815 to 1816 was somewhat mild, with below normal precipitation. The spring months of March and April continued to be cool and dry, delaying the spring planting. Frost continued to be a problem as far south as Pennsylvania and Virginia. In fact, snow fell in parts of New England as late as the middle of May. Snow was fairly rare as late as May, even though an occasional flurry or two had been known to occur.

In late May and early June the weather turned mild enough to begin planting. Unfortunately, colder weather was once again on the horizon. In early June a severe cold snap plagued New Englanders and up to 10 inches of snow blanketed the region. This outbreak of cold weather destroyed crops as far south as Pennsylvania and Ohio, and even resulted in the death of some livestock.

The weather took a swing for the better by late June and early August. Crops had been replanted and optimism was high, as plants grew strong and healthy. It was not until late August when farmers were reminded of the harsh spring, as another series of severe cold snaps brought hard killing frosts to the area. Once again much of the season's crops had been killed, or damaged beyond recovery.

Thereafter the weather only worsened. The first part of September was warm. But another series of cold outbreaks, one during the middle of the September, and another at the end of the month wiped out much of what was left of any crops and brought the very poor growing season to an end.

As it turned out, New England was not the only region to experience the harsh weather. Europe was going through much of the same type of weather. Fears of a winter famine became very widespread, and for some a reality. Vermont, New Hampshire, and Maine were the hardest hit in the United States. But England, Germany, and France also experienced a very cold summer and the widespread famines that followed during the following severe winter. The cold weather actually drove people to migrate from the New England area and is credited by many historians in helping with the growth of the population in the Mid-Western states during following years.

But one has to ask what caused all of this misery? As is the case many times, rumors were rampant. One such rumor involved the lightning experiments that Ben Franklin had performed some years before. Some believed that over time the lightning rods that Ben had invented had actually cooled the atmosphere.

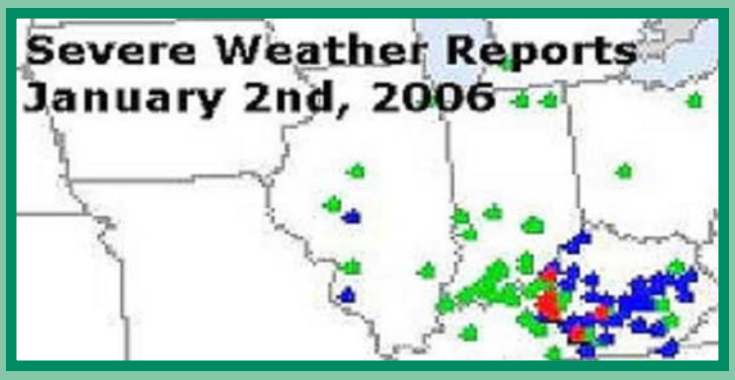
But as the years passed, scientists began to understand that the climate change experienced in those years surrounding 1816 was likely the result of the eruptions of some large volcanoes just a few years before. One particularly strong eruption was the Tambora volcano located in the Philippines. This 13,000 foot behemoth shot an estimated 37 to 100 cubic miles of dust and debris into the upper atmosphere, which blocked out much of the sun's energy over the following year.

This type of event is more common than one might think. Just recently, Mount Pinatubo erupted in June of 1991. This eruption blew almost 500 feet off the top of the volcano and sent dust and chemicals high into the earth's atmosphere. This reflected much of the sun's energy during 1992 and 1993 and resulted in an overall decrease in the earth's average global temperature of a little over 1°F.

Do you have any interesting weather photos you would like to share with us? If so, send them to our webmaster at: www.weather.gov/jacksonky. Along with a copy of your picture, give us the location, date of event and name of person submitting the picture.

Storm of the Season

By: Tony Edwards
General Forecaster



Normally the Spring Edition of the Newsletter features a "Storm of the Season" segment dedicated to either a crippling snowstorm or a bad flood, as these are typically our area's troublemakers during the winter months. This past winter season was not at all a normal one however, as a drought was over the area for all of the fall and most of the winter months producing very little snowfall. Adding to the oddities was a large severe weather outbreak that occurred early in January, which is probably the best candidate for this newsletter's "Storm of the Season".

The severe weather was set up by a very warm air mass over the southeastern United States on the 2nd. Temperatures across east Kentucky climbed into the mid to upper 60s during the afternoon hours, readings which were 20 to 25 degrees above normal for the date. Along with the warmth, surface dewpoints (a measurement of moisture in the atmosphere) approached the 50-degree mark over parts of the area…unusually high values for early January. Above the surface, colder air and strong winds moved over the warm and unstable surface air mass. The trigger that fired the storms was an approaching cold front, which moved across the Bluegrass State during the afternoon and evening hours.

The outbreak took shape over western and central Kentucky during the early and middle afternoon hours when 7 tornado reports and numerous wind and hail reports were received by the Louisville Weather Office. A couple of reports included hail 2 inches in diameter…that's bigger than golf balls! Thankfully, the atmosphere was a little less unstable over eastern Kentucky and the thunderstorms did not produce any tornadoes, despite a few tornado warnings being issued. However, the storms transformed from tornado and large hail producers into damaging wind producers as they ripped across the Coalfields of eastern Kentucky. In all, 20 reports of damaging thunderstorm winds and an additional 6 severe hail reports (¾ of an inch diameter or larger) were received at the Jackson Weather Office before the storms weakened and moved east of the area during the late evening hours. Thankfully, no reports of injuries were received from this event.

Hydrology

By: Britt Westergard
Service Hydrologist

The National Weather Service held the second annual national Flood Safety Awareness Week this March, from the 20th through the 24th. NOAA's National Weather Service offices throughout the United States, including your local Jackson Kentucky office, are working together to provide the public with information on why floods are a significant weather-related hazard in the United States.

The goal of this campaign is to highlight some of the many ways floods can occur, the hazards associated with floods and what you can do to save your life and property.

Flooding can occur any time and any place. Floods can arrive within a moment's notice or over a longer period of time. The can roll boulders the size of cars, destroy buildings and bridges and take human lives. There are an average of 106 flood-related deaths in the United States each year.

Floods are the deadliest weather-related killer in the United States. Over half of flood-related deaths occur when people drive into flooded roadways or simply walk through moving water. As little as six inches of fast-moving water can knock you off your feet and two feet of flowing water will float most vehicles, including sport utility vehicles and trucks. While most floods can't be prevented, there are some simple steps you can take to protect your life and property.

Below are just a few of the flood safety tips that will be repeated throughout Flood Safety Awareness Week:

- ✓ If flooding occurs, move to higher ground immediately.
- ✓ Don't allow children to play near high water, storm drains or ditches. Hidden dangers often lie beneath the water
- ✓ Flooded roadways can have significant damage hidden by floodwaters. Never drive on a flooded road. When approaching a flooded roadway, "Turn Around, Don't Drown".
- ✓ Do not park your vehicle or camp along streams or washes.
- ✓ Be especially cautious at night when it is harder to recognize flood dangers.

Visit http://www.nws.noaa.gov/floodsafety/ for additional information about National Flood Safety Awareness Week, or http://www.weather.gov/jacksonky for water and weather information.

Jackson Weather Service's 25th Anniversary Celebration

By: Tabitha Brewer, Administrative Support Assistant

&

Bonnie Terrizzi, Hydrometeorological Technician

The Jackson Weather Service Office celebrated 25 years of service to Eastern Kentucky on October 5, 2005. Many of our partners and customers were present to share in the festivities. The employees of the weather service office hosted a barbecue. , with Pete Geogerian, a forecaster, being the main chef and all other employees brought in side dishes, chips, and drinks. Rhonda Geogerian, Pete's wife, kept the food and drinks flowing by refilling empty bowls and coolers. There were over 166 people from our County Warning Area in attendance. We had several activies going on that day, such as tours of the Weather Service Office. Martha Yount and the Breathitt County Extension Office had a Home Evacuation Plan and a Survival Kit in a bucket display, Morgan Co. Chapter of the American Red Cross set-up an information booth, Christie Cook of the Johnson Co. Conservation District brought an Enviroscape and River Erosion Model display and we had on display Weather Balloons and various pictures taken over the 25 year period.

The Cadet Leadership Education Program started off our festivies with the Color Guard Presentation, followed by Shawn B. Harley, the Meteorologist-in-Charge welcoming everyone to our celebration and recognizing our Cooperative Observers in attendance. The Jackson Independent School Band provided music for our celebration. Breathitt County was presented their StormReady Certification and the Breathitt County Extension Office was recognized for being the first Extension Office in Kentucky to support the StormReady program. The National Weather Service Holm Award was presented to J.D. Rodgers, of Monticello, Kentucky and the Edward T. Earhart Family was recognized for their support of the Edward T. Earhart Scholarship Program established by the staff of the Jackson Weather Service Office. On a lighter note, the employees presented Tim Stanley, our Electronic Systems Analyst, with the "Old Timer's Award" for being the employee who has been at the office the longest time (1992 - Present). Door prizes were donated by the following local businesses: Hazard Community College Bookstore, Rose Bros. Department Store, True Value/Radio Shack, Town and Country Florist, Carla Rodriquez, DMD, and Sears. It was a fun day for all that attended.

Cake baked and decorated by Mary Harbage, wife of Lead Forecaster Dustin Harbage

Cadet Leadership Education Program performing Color Guard

Jackson City Independent School Band

Welcome by Shawn Harley, Meteorologist-in-Charge

Cooperative Observers

Presentation of StormReady Certificate and Sign to Breathitt County

Presentation of StormReady Partner Certificate to Breathitt Co. Extension Office

Presentation of Old Timers' Award to Tim Stanley

KID'S CORNER

By: Anthony Richey
General Forecaster

How to Make Your Own Pet Tornado

Materials:

- 1 round mason jar with lid
- 2 tablespoons of liquid soap
- Food coloring
- Glitter

Instructions:

1. Fill jar ¾ the way full with water
2. Add 2 tablespoons of liquid soap, a few drops of food coloring, and some glitter
3. Put lid on jar
4. Hold the top of the jar, shake the jar in a circular motion and watch the tornado form! The food coloring and glitter will give your tornado color and make it easier to see!!